

A NEW 13 PROGNOSTICATION

For the Year of our Lord, 1684.

*Being Bissextile or Leap-year; and from the Creation of
the World, 5633.*

Wherein is contained, the exact Day, Hour, and Minut of the New Moon, her Full and Quarters; with a Description of the Eclipses this Year; the daily disposition of the Weather, and Moveable Feasts: A Table of the Suns rising every fifth day; A Table of Annual-rent, a Table of the Tides of *Lieth*, and a Table of the Moons age, with the whole remarkable Fairs in SCOTLAND.

Exactly calculated according to Art, for the Meridian of the most famous City of *EDINBURGH*.

Whose $\left\{ \begin{array}{l} \text{Latitude} \\ \text{Longitude} \end{array} \right\}$ is $\left\{ \begin{array}{l} 56^{\text{d.}} 00 \\ 00 00 \end{array} \right\}$

According to the Newest Tables.



By JAMES PATERSON Mathematician.

Edinburgh, Printed by DAVID LINDSAY, and his Partners,
for the year 1684.

*A succinct Computation of memorable things
to this present Year, 1684.*

	The Creation of the World	5633
	The Flood of <i>Noah</i>	3677
	The destruction of <i>Sodom</i> and <i>Gomorrhah</i>	3586
	The building of <i>Rome</i>	2436
	The building of <i>Edinburgh</i> Castle	2014
	<i>F E R G U S</i> the First King of <i>Scotland</i>	2013
	The Passion and Death of <i>C H R I S T</i>	1651
	<i>Paul</i> was converted, &c.	1650
	<i>Rome</i> was burned by <i>N E R O</i>	1623
	The Christian Faith was first received in <i>Scotland</i>	1474
	The Invention of Printing	244
Since	{ The Colledge of <i>Glasgow</i> was builded by the reverend Bishop <i>Turnbull</i>	} 229
	The Colledge of <i>Edinburgh</i> was builded	102
	The Coll. of <i>Aberdeen</i> was founded by the Earl of <i>Marshall</i>	91
	The Gun-pouder Treason, Nov. 5.	79
	{ The Birth of King <i>C H A R L E S</i>	} First 84
	{ The Birth of his Royal Highness <i>J A M E S</i> Duke of <i>Albany</i> and <i>York</i>	} Second 54
	{ The Rebellion in <i>Ireland</i>	} 50
	<i>K. C H A R L E S</i> the Second was Crowned at <i>Secon</i>	35
	His Majesties happy arrival at <i>London</i> , May 29.	24

Common or Vulgar Notes this Year, 1684.

T H E Golden Number is	13
The Epact	23
The Dominical Letter	F. E.
Fastens even, or Shrove tuesday	Febr. 12
Pasch or Easterday	March. 30
Whitsunday	May 18

Of the Eclipses this Year, 1684.

THere will be four Eclipses this year. *viz.* two of the Sun, and two of the Moon. The first will be an Eclipse of the Sun on January the 6 day, at 6 a Clock at night in the 26 degree of Capricorn. a great Eclipse, but invisible to us, because the Sun will be set.

The second will be an Eclipse of the Moon, on June 17. in the degree of Capricorn. And will be visible to us as followeth.



The true time of the apparent opposition at *Edinburgh*, June 17 day

}	h. m. s.	
	2 23 48	morn.
}	digit	

The Digits Eclipsed

1 20 36

The beginning of the Eclipse at *Edinburgh*

}	1 50 27
---	---------

The greatest obscuration

3 11 17

The end invisible because the Sun will be risen.

The third will be an Eclipse of the Sun, on the second day of July, in the 22 degree of Cancer, and will be visible to us as followeth,



The apparent time of the true conjunction at *Edinburgh*, July 2 day

}	h. m. s.	
	2 11 17	aftern.
}	digit	

The Digits Eclipsed

7 48 24

The beginning of this Eclipse at *Edinburgh*.

}	1 13 26
---	---------

The greatest obscuration

2 29 41

The end of the Ecl. at *Edinb.*

3 41 11

The fourth will be an Eclipse of the Moon on the 11 day of December, in the first degree of Cancer, and will be visible to us as followeth,



The true time of the apparent opposition at *Edinburgh*, December 11 day

}	h. m. s.	
	10 15 20	night
}	digit	

The Digits Eclipsed

9	fere
---	------

The beginning of this Eclipse at *Edinburgh*.

}	8 47 5
---	--------

The greatest obscuration

10 22 50

The end of this Ecl. at *Edinb.*

11 58 35

On October the 3^d there is a Conjunction of Saturn and Mars in the 13th of Virgo, which Astrologers say is a sign of much wrangling and treachery in the world, especially in those places under Virgo.

Also I find the most part of the Eclipses this year, and Especially those which are visible to fall in Cancer, and the rest falling in its opposite Capricorn, which shews great alterations in those Kingdoms under the Moon and Cancer, viz. *Scotland, Holland, Zealand, &c.* The effects whereof partly falls in this year, and partly in the year following, viz. 1685. As also in the year 1685, I find a visible Eclipse in the same sign Cancer, which is admirable that the Moon and Sun should Eclipse others Lights so often, the sign being the Moons house:

But here's a wonder exceeds all the rest;
Which happen shall ere eighty three be past:
On Munday Hallow-even they say will be,
When Hallow-day on Thursday ye will see.
If any doubt it, sure it will be seen
In Almanacks which came from *Aberdeen*;
Which Vulgar still count for to be the best:
Therefore they must now count two dayes for rest
Since that the like before was never seen
That Hallow day falls three dayes after ev'n,
But this most true when these two dayes expire,
That many one shall others throw in fire,
Who out shall run with blinded eyes and steall,
That many one shall this destruction feell,
To find what's lost, Astrologers do say;
Seek above doors before the break of day.

The Errata of the last years Almanack corrected.

Page 4 and last line for Wednesday, read Tuesday. Pag. 12, line 30; for 15. read 25. others of less note I leave for the Author of the *Aberdeens* Almanack to Carp on, least he want matter to fill up his empty sheet.

A D V E R T I S E M E N T.

Concerning the Fairs of the Ancient Burgh of Lanerk, as they are new changed.

1. Fasten even Fair upon Fasten even day.
2. Pasch Fair upon the Wednesday after Pasch.
3. Whitunday Fair upon the Wednesday after Whitunday.
4. St. J A M E S Fair upon the last Wednesday of July.
5. Hook Fair upon the last Friday of August,
6. ~~St. Andrew's~~ Fair upon the first Wednesday of November.

*The exact Day, Hour and Minut of the New
MOON, her Full and Quarters, with the daily disposition of
the Weather, the whole remarkable Fairs in SCOTLAND;
With some remarkable dayes for the year 1684. Also
the Suns rising and setting at Edinburgh,
the 1. day of each Moneth.*

January begins on Tuesday, XXXI Dayes.

Sun riseth 25 minut. past 8. and sets 35 min. past 3.

New Moon Sunday the 6 day, 14 min. past 5. in the afternoon.

First quarter Munday 14 day, 35 min. past 6 in the afternoon.

Full Moon Tuesday 22 day, 43 min. past 7 in the forenoon.

Last quarter Munday 28 day, 22 min. past 9. in the afternoon.

This year begins with moist Weather to the 6 day, from thence to the 10 day unconstant, thence to the 21 moist, thence to the 27. Snow and Windy, thence to the end cold Weather.

The first Fair in the year is at Kilsyth the 1 day: St. Naughlans Fair at the Town of old Meldrum, the 2 Tuesday. Tantan fair at Lawrence Kirk, and at the Kirk of Bethelny in Gerry upon the 7 day. St. Mungo in Glasgow the 13 day, at Dunkel and Kilwinning the 21 day. St. Pauls fair at Turriff in Buchan the last Tuesday.

February begins on Friday, XXIX. Dayes.

Sun riseth 25 min. past 7. sets 35 min. past 4.

New Moon Tuesday 5 day, 56 min. past 9. in the forenoon.

First Quarter Wednesday 13 day, 31 min. past 1. in the afternoon.

Full Moon Wednesday 20 day, 29 min. past 4. in the afternoon.

Last Quarter Wednesday 27 day, 10 min. past 7. in the forenoon.

This moneth begins with cold weather, untill the 4 day, from thence to the 9 moist, thence to the 18 frost, thence to the 23 changeable, thence to the end moist weather.

St. Brides fair at Abernethie, Forres in Murrayland, and at the Town of Innerness the 1 day, Candlemas fair in Bamff, Dunkel, Dingwall and Douglas the 2 day, Candlemas fair at the Town of Ratray in Buchan the first tuesday after Candlemas, at Comper of Fife the first Wednesday of the moneth. Valentines day being still on the 14 day, a fair at Linlithgow, at Forfar the 15 day, holding 8 dayes, at Valley-Field the 24 day.

Whiles in February, whiles in March.

Fastenseven fair at Fyvie, and Lanerik on Fastens.even-day.

March begins on Saturday, XXXI. Dayes.

Sun riseth 20 min. past 6. sets 40 min. past 5.

Full Moon Friday 21 day, 40 min. past 1. in the forenoon.

Last quarter Thursday 27 day, 9 min. past 7. in the afternoon.

This moneth begins with moist weather to the 5 day, thence to the 12 day fair and clear, thence to the 16 day moist, to the 21 fair, thence to the end kindly March weather shiteing and shining.

Saint Monnence in Aberdeen, Dunfermling, Abercherder, St. Marnoch-Kirk, and Strathven the 1 day, a Fair at Kennoquhy in Fife, consisting of Horse, Neat, &c. with a weekly Mercat every Wednesday of all Flesh, Fishes, &c. belonging to the Laird of Balfour, Pettenweem the 3 day, St. Marnoch fair at the Kirk of Leuchell the 1 Tuesday, at Dumblain the first Wednesday, a Fair at Markinch the 6 day, St. Duthos in Tane of Ross 9 day, at Inverness and Auchtertuil the 10 day, St. Causnan the 12 day, St. Patricks Fair in Dumbarton, Kirkaldie, and at the Kirk of Strageeth the 16 day, at S. Iohnstoun the 19 day, S. Cuthberts Fair in Langtoun of the Mers the 20 day, Lady day in West-Weems, Banff, and Auchtermuchtie the 25 day.

Whiles in March, and whiles in Aprile.

Mid-lentron Fair at Tranchie-banchrie on Thursday before Mid-lentron Sunday, Palm-Sunday at the Kirk of Forrig, and at the town of Innerness and St. Iohnstoun all upon the Munday thereafter, a Fair at New Leslie upon the Tuesday, after Palm-Sunday, Skire-hursday Fair at Glasgou, Dumbarton, Couper of Angus, Elgin of Murray, Frendrought, and in old Aberdeen the Thursday after Palm-Sunday, Pasch-Munday a Fair at Couper of Fife, and Irwine, a Fair at the Town of Forres in Murray Shire, Borrowstonness, and Corstorphine the first Tuesday after Pasch, Pasch Fair at Lanerk upon the Wednesday after Pasch, a Fair at St. Andrews, holding all the Week after Low-Sanday.

Aprile begins on Tuesday, XXX dayes.

Sun riseth 8 min. past 5. sets 52 min. past 6.

New Moon Friday the 4 day, 41 min. past 8. in the afternoon.

First quater Saturday the 12 day, 48 min. past 6. in the afternoon.

Full Moon Saturday the 19 day, 35 min. past 9. in the forenoon.

Last quarter Saturday the 26 day, 50 min. past 8. in the forenoon.

This moneth begins with moist weather to the 4 day, thence to the 12 temperat heat, to the 18 changeable, to the 21 rain, to the 25 Fair and clear, to the 29 rainy, this moneth ends with pleasant weather.

St. Oles Fair at Cruden in Buchan, and Corstorphin the first Tuesday, St. Donalds Fair at the Kirk of Auchterless in Buchan the

Marks day being the 25, and the first Beltanday being the 26 day, a Fair at Rugland the 28 day, lasting 4 dayes, Rude Fair at Ratray in Buchan the last Tuesday, a Fair at Leven the 29 day, in Kilreny the 3 day.

May begins on Thursday, XXXI. Dayes.

Sun riseth 4 min. past 4. sets 56 min. past 7.

New Moon Sunday the 4 day, 31 min. past noon.

First Quarter Munday the 12 day, 23 min. past 3. in the forenoon.

Full Moon Sunday the 18 day, 14 min. past 5. in the afternoon.

Last Quarter Munday the 26 day, 12 min. past mid-night.

This moneth begins with pleasant weather to the 4 day, thence to the 10 kindly May shows, to the 12 hot weather, to the 18 cold, with rain about the middle of the moneth, to the 22 hot weather, to the 27 cold shows, the moneth ends with pleasant weather.

A Fair in the New Burgh of Ciren the first Tuesday, with a weekly mercat every Munday, and another every Friday, belonging to the Laird of Pinkell, St. Philips Fair in the Grange in Linlithgow Shire, and at the New Kirk of Kilpatrick the 1 day, Rude Fair at Ellon in Buchan, Belton Fair at Monross in the Shire of Angus, at Kinrocher and Pebles, S. Congals Fair at the Kirk of Doors in Merns Shire, Fumuck Fair at Fumuck Kirk in Farnff Shire all on the 3 day, a Fair at Renfrew, Carlouk, and Drymen the 9 day, Erandon Fair at Farnff and Kirkaldie the 16 day, S. Johns Fair at old Meldrum the last Tuesday, a Fair at Glenquithel the last Wednesday.

Whiles in May, whiles in June.

A Fair at Sterling ten dayes before Whitsunday, Whitsunday Fair at Stone-hive in Merns Shire on the Tuesday before Whitsunday, Whit-sun-munday at Glasgow, Dumbarton and Leithburgh, Whitsun-tuesday called Pardon-day at Chanry in Ross, Borrow-stonness, Peter-head, Kirk of Ninians, Linlithgow, Demblain, Whitsunday Fair at Lanerk the Wednesday after Whitsunday, Trinity Sunday, being still the Sunday after Whitsunday, Trinity Munday at Edinburgh, holding 8 dayes, at Trechin, S. Andrews and Farniland the same day, Trinity Tuesday in Rugland, Trinity Wednesday at the Moor of Dun, Trinity Thursday at Falkland.

June begins on Sunday, XXX. Dayes.

Sun riseth 23 min. past 5. sets 37 min. past 8.

New Moon Tuesday the 3 day, 22 min. past 2. in the forenoon.

First Quarter Tuesday the 10 day, 50 min. past 9. in the forenoon.

Full Moon Tuesday the 17 day, 5 min. past 2. in the forenoon.

Last Quarter Tuesday the 24 day, 56 min. past 4 in the afternoon.

This moneth begins with moist weather to the 6 day, thence to the 13 hot, thence to the 16 day rain, thence to the 19 Fair, to the 24 moist weather, to the 29 Fair and clear, the moneth ends with rain.

A Mercat at Kinross the first Tuesday, in Lang-Town the 5 day, a Fair at Stramiglo, Aberdour, and Ennerkeithing the 6 day, St. Colms Fair at Drumhead in Belhelvie, also St. Colms Fair at the Kirk Town of David in the Gerry, New-deer in Buchan all upon the second Tuesday, a Fair at Drymen the 9 day, in Forzondenny the 10 day, St. Barnabie in Lawder, Dysert, Dowglas, St. Laurence Fair in Grinnock, Preston-pans, and Dirletoun all on the 11 day, St. Margarets Fair upon the Mains of Keilh-hall (some tymes called Caskey-byn,) at Turreff and at the Burgh of Annan, all upon the 3 Tuesday at Abernethy, Ceres in Fife the 13 day, in Auchtertuil, Belhelvie, Clackmanan, and Scoon the 15 day, at Straven the 16 day, St. Margaret in Dumfermling, and at Moffat the 18 day, at Earlestoun the 19 day, Monro his Fair holden at Colrain in Ross-shire the 20 day, at Methil near Levens-mouth the 22 day, S. Iohn the Baptists day, and Midsummerday being still the 24 day, in Forres, Carnwath, Hawick, and at Townyettam on the Border, and at Frazerburgh all on the 24 day, in Alathy in Angus, called St. Emagola, and at the Town of Nicolson, both on the 25 day, St. Peters day at Forfar, Faulkland; Bruntland, Bamff, and Kelso, all on the 26 day, a Fair at Gallashels the 27 day, St. Peter and Pauls day, being alwayes the 29 day a Fair at Pebles, S. Seriffs Fair at the Kirk of Rulshalmen in Gerry, the last Tuesday of this moneth. Also St. Peters Fair at Migel in Perth Shire and Hadingtoun, both upon the last day.

July begins on Tuesday, XXXI. Dayes.

Sun riseth 32 min. past 3. sets 28 min. past 8.

New Moon Wednesday the 2 day, 6 min. past 2. in the afternoon.

First Quarter Wednesday the 9 day, 17 min. past 1. in the afternoon.

Full Moon Wednesday the 16 day, 11 min. past noon.

Last Quarter Thursday the 24 day, 32 min. past 9. in the forenoon.

This moneth begins with moist weather to the 3 day, thence to the 8 fair, to the 12 rainy, to the 16 fair, to the 21 winde and rain, to the 26 cold and windy, thence to the end bad weather.

A Fair at Culross, Stow, and Eazerstoun in Teviotdale all on the first day, Abernethie and Auchtermuchtie the second day; St.

new Market in Dundee the 1 Tuesday, S. Thomas in Langtoun the 5 day,
Lady mercat at the Kirk of Forden in the Merns 6 day, St. Andrew;
Glasgow and Innerness the 7 day, at Borrow-stonness, Burgh of
Annan, and Aikie Fair at the Town of Old Deer, all on the second
Tuesday, St. Lawrence at Crinnock the 11 day, at Kilwinning the
12 day, S. Margaret in Killimuir, and at the Kirk of Forrig the 13
day, in Moffat and at Kirkaldie the 18 day, at Stirling 20 day,
Mary Magdalen in Lawder, Linlithgow, Pettentreen, and Path-
head 22 day, S. Margarets fair at Frendraught, and in Tarves the
3 Tuesday, S. Andrews fair at the Kirk of Glas in Strabogie, on
Tuesday after the 15 day, in Airth and S. Christiana in Corstorphine
both on the 24 day, S. James in Forfar, Kinghorn, Comper of Fife,
Roxburgh, Alloway, Musselburgh and at Elgin in Murray, all on
the 25 day, at Kinloch, Rannoch in Athol, in Perth shire, at
Turreff in Buchan, new Lesly and at White-born all on the last Tues-
day, S. James fair at Lanerk on the last Wednesday.

August begins on Friday, XXXI. dayes.

Sun riseth 25 min. past 4. and sets 35 min. past 7.

New Moon Friday the 1 day, 47 min. past 1. in the morn.

First quarter Thursday the 7 day, 15 min. past 7. in the afternoon.

Full Moon Friday the 15 day, 32 min. past mid-night.

Last quarter Saturday the 23 day, 44 min. past 2. in the morn.

New Moon Saturday the 30 day, at 10 in the forenoon.

This moneth begins with good weather to the 4 day, thence to
the 8 cloudy with showers now and then, to the 17 winde and raine,
to the 22 good Harvest weather, to the 27 winde and raine, the
moneth ends with good Harvest weather.

Lambasday in Atturff, Melrofs, Ennerkeithing, S. Andrews
and Dumbarton all on the 1 day, S. Lawrence fair in Rane the first
Tuesday, and Thursday after in Faulkland, S. Lawrence in Merns
shire upon Lawrence Muir, a little above the place of Hankertoun,
holding 4 dayes and at Jedburgh, Marymas fair at the Town of Mory-
musk, all upon the 2 Tuesday, at Kilsyth the 5 day, in Meiklour the 7,
S. Lawrence in Selkirk, Auchtermuchtie, Forres, Carnwath, and
Dumblain, all on the 10 day, Lady day the first in Dundee, Banff,
Merns, Valley-field, and Marymas fair in Innerness, all on the 15
day, the 20 day at Rugland a fair in Scoon the 22 day, Marymas
fair in the Town of Ellion in Buchan, and at the Town of Ratray in
Buchan, both upon the 3 Tuesday, S. Bartholomew Apostle in Lin-
lithgow, Clackmannan, Kincairn of Neil, and in Peebles, all on the
24 day, S. Zephirinus in Corstorphine the 26 day, Samarevis day in

September begins on Munday, XXX. dayes.

Sun riseth 33 min. past 5. sets 27 min. past 6.

First quarter Saturday the 6 day, at mid-night.

Full Moon Saturday the 13 day, 40 min. past 4. in the afternoon.

Last quarter Sunday the 21 day, 20 min. past 7. in the afternoon.

New Moon Sunday the 28 day, 13 min. past 7. in the afternoon.

This moneth begins with rain to the 4 day, thence to the 7 more clear, to the 14 rainy, to the 19 fair and clear, to the 23 moist weather, thence to the 28 fair, the moneth ends with rain.

S. Giles fair in Elgin the 1 day, in Moffat the 2 day, Semervis in Keith the first Tuesday, in Skirline the 4 day, latter Lady day in Dundee, Stirling, Bamff, and at the Town of Inverury all on the 8 day, at Monimusk, and at the Kirk of Auchindoo, all on the second Tuesday, Rude fair at Inverness and Iedburgh the 14, at Forfar the 15, at Kirkaldie the 20 day, a new fair at Kennogubhy in Fife, belonging to the Laird of Belfour, as also a fair at Karill, Iedburgh, Dumfermling, Dumfreis and Athelston the 24 day, a fair at Leven, Nicolson, Tranent, and Dury, all on the 27 day, S. Michaels day being alwayes upon the 29 day, a fair at new Lesly, Haddington, Air, S. Andrews, Creif, Kirkcudbright, Gallashiels and at the Kirk of Forrig, S. Ierome in Bamff the last day, a fair at the Kirk of Kinel, and Frazerburg on the last Tuesday.

October begins on Wednesday, XXXI. dayes.

Sun raiseth 43 min. past 6. sets 17 min. past 5.

First quarter Sunday the 5 day, at 9 in the forenoon.

Full Moon Munday the 13 day, 45 min. past 8. in the forenoon.

Last quarter Tuesday the 21 day, 40 min. past 10. in the forenoon.

New Moon Tuesday the 28 day, 26 min. past 4. in the forenoon.

This moneth begins with good weather to the 4 day, thence to the 11 violent rain, to the 16 changeable, thence to the 21 rainy, to the 28 more clear, the moneth ends with good weather.

The 1, 2, 3. a fair in Salt Preston at Dundee, Kinloch Rannoch in Athol, Turreff in Inchan, Mid. Calder all on the first Tuesday of this moneth, S. Francis in Abernethie and Valley-field the 4 day, in Meiklour the 5 day, in Comper of Fife the 6 day, a fair at the Town Lon-head of Laswaid, and at Markinch the 8 day, Kirtoun of Monifeeth, Saint Dionise in Peebles, Earleston, Kirkinilloch, Aiton, Auchtermuchtie, Ceres in Fife, Killimuir, Moffat, and S. Dinner in S. Iohnstoun all on the 2 Tuesday, at Dalkeith, with a weekly Mercat every Thursday, and Tillibol the 10 day, a fair at Eglesim

A TABLE of Annualrent at 6 L. per Cent. per annum.

The use.

Pr.	Annualr.	Pr.	Annualrent
sh. L. sh. d.	L.	L. sh. d.	
1	0 00 01	10	00 12 00
2	0 00 01	20	01 04 00
3	0 00 02	30	01 16 00
4	0 00 03	40	02 08 00
5	0 00 03	50	03 00 00
6	0 00 04	60	03 12 00
7	0 00 05	70	04 04 00
8	0 00 06	80	04 16 00
9	0 00 06	90	05 08 00
10	0 00 07	100	06 00 00
sh. L. sh. d.	L.	L. sh. d.	
11	0 00 08	100	06 00 00
12	0 00 08	200	12 00 00
13	0 00 09	300	18 00 00
14	0 00 10	400	24 00 00
15	0 00 10	500	30 00 00
16	0 00 11	600	36 00 00
17	0 01 00	700	42 00 00
18	0 01 01	800	48 00 00
19	0 01 01	900	54 00 00
20	0 01 02	1000	60 00 00
L. L. sh. d.	L.	L. sh. d.	
1	0 01 02	1000	60 00 00
2	0 02 04	2000	120 00 00
3	0 03 07	3000	180 00 00
4	0 04 09	4000	240 00 00
5	0 06 00	5000	300 00 00
6	0 07 02	6000	360 00 00
7	0 08 04	7000	420 00 00
8	0 09 07	8000	480 00 00
9	0 10 09	9000	540 00 00
10	0 12 00	10000	600 00 00

TO finde the Annualrent of any principal summe by this Table, if the principal summe be under 10 L. seek it under the 1 Column of the Table and towards the right hand in the second Columnne, you have the Annualrent thereof. But if the principal summe be above 10 L. seek the tens, hundreds or thousands in the third Columnne, and towards the right hand in the fourth Column you have the Annualrent belonging thereunto; and if there be any oddde pounds and shillings, seek them as before, and add their Annualrent to that which you have found, and the totall is the Annualrent required.

1. Exemple.

Suppose it be required to finde the Annualrent of 138 L. 13 sh. for a year: workethus,

L. Pr.	L.	sh.	d.	
100	6	00	00	Interest or Annualr.
30	1	16	00	
8	0	09	07	
13 sh.	0	00	09	
<hr/>				Totall.
138 L.	13 sh.	8	06 04	

To finde the Annualr. of any summe above 10000 L. which is not in this Table, consider that every 10000 L. thereof is 600 L. Annualrent, and find the rest as in the Table.

To finde the Annualr. of any summe for one, two or three moneths, &c. take the twelve part of that, which a year yealds and that will be the Annualr. for a moneth, its double for two moneths, its triple for three moneths, &c.

A Table of the Suns rising and setting.

Sun ri- sing every 5 day of each mo- neth.	Edin- burgh Glas- gow and North of Ire- land.	Mun- ross Ston- hive the Skye.	Ross Ski- reafin Lews.	Caith- ness Ork- ney North of Scot- land.	Shet- land Ber- gen.	Setting every 5 day of each mo- neth.
Latitude.	56d	57d	58d	59d	60d	Latitude.
m.d. d.m.	h. m.	h. m.	h. m.	h. m.	h. m.	m.d. d.m.
June 11 11	3:20	3:12	3:4	2:52	2:44	December 11 11
5 17	3:21	3:13	3:5	2:53	2:46	27 5
29 23	3:24	3:16	3:9	3:00	2:51	23 29
23 30	3:30	3:22	3:16	3:7	2:59	28 23
May 17 62	3:38	3:31	3:25	3:17	3:9	3 17
10 1	3:48	3:42	3:36	3:29	3:22	9 11
4 19	3:59	3:53	3:48	3:41	3:35	15 6
28 25	4:11	4:6	4:01	3:55	3:50	21 31
22 31	4:23	4:19	4:15	4:10	4:5	27 25
15 6	4:36	4:30	4:25	4:23	4:21	2 19
9 13	4:50	4:47	4:44	4:40	4:37	8 13
3 19	5:4	5:2	4:59	4:56	4:54	14 7
28 15	5:18	5:16	5:14	5:15	5:16	20 31
22 31	5:33	5:31	5:29	5:28	5:27	26 25
26 6	5:46	5:45	5:44	5:44	5:43	4 18
10 12	6:00	6:00	6:00	6:00	6:00	10 12
4 18	6:14	6:15	6:15	6:16	6:17	16 6
26 25	6:28	6:29	6:31	6:32	6:33	22 31
20 1	6:42	6:44	6:46	6:48	6:50	28 25
14 7	6:56	6:59	7:1	7:3	7:6	3 19
8 13	7:10	7:13	7:16	7:19	7:23	9 13
2 19	7:24	7:27	7:31	7:35	7:39	15 6
27 25	7:37	7:41	7:45	7:50	7:55	22 31
21 31	7:49	7:54	7:59	8:4	8:10	28 25
15 6	8:1	8:6	8:12	8:18	8:25	4 19
9 11	8:12	8:18	8:24	8:31	8:38	10 12
3 17	8:22	8:28	8:35	8:43	8:51	17 6
28 23	8:30	8:37	8:44	8:52	9:1	23 30
23 29	8:36	8:43	8:51	9:00	9:9	29 23

The use.

TO find the Suns rising at any of the for-mentioned place seek the day of the moneth in the left-side and the place in the head and where the meet shewes the time of the Sun rising for that day required.

Example.

To find the Sun rising at Edinburgh the 3 of April for any year whatsoever, seeing the difference is insensible in this age: I seek April in the left-side and Edinburgh in the head, and I find the Sun to rise at 5 houres 4 minuts.

To find the Suns setting by this Table, seek the day of the moneth in the right-side, & the place in the head as before, and where they meet shewes the time of the Suns setting for that day required.

Example.

To finde the Suns setting at Edinburgh the 3 of Aprile aforesaid: I seek April in the right-side and Edinburgh in the head, and in the angle of meeting I find 6 houres 56 minutes required.

A Tide Table for *Leith*, Corrected by JAMES PATER- SON Mathematician.

The use.

Seek the Moons age in the first and second Column of the Table, and in the two last Columns you have the true time of full Sea at *Leith*.

Example to find the full Sea the 28 of *May*, 1684 In the following Table of the moons age, I find the moons age 24. which I find in the second Column of this Table, and against it in the last Column I find 8 hours 42 min. the true time of full Sea required.

Those who desire to be exact in the Tides, must know that this Table serves only the afternoons Tide, if the fore-going change be in the fore-noon : and the fore-noon Tide, if the fore-going

A Table shewing the hour and min. of high water at *Leith*, for every day of the Moons age increasing or decreasing.

Moons age		Full Sea at <i>Leith</i> .	
Increase	decrease	hours.	min.
1	16	3	3
2	17	3	46
3	18	4	29
4	19	5	7
5	20	5	45
6	21	6	19
7	22	6	51
8	23	7	39
9	24	8	42
10	25	9	45
11	26	10	43
12	27	11	41
13	28	0	34
14	29	1	27
15	30	2	15

Change was in the afternoon : and if you be seeking the other Tide, you may take the proportional part between the two Tides given in the Table next the Tide required.

ADVERTISEMENT.

There is an Arithmetick Book, which is both easy and compendious, either for young or old ; which I intend to put to the press about the beginning of this year 1684. and will be sold at an easy rate.

A ready Table shewing the age of the Moon every day throughout this Year 1684.

The Dayes of the Moneths.

Dayes	January.	February.	March	April	May	June	July	August	Septem.	October	Novem.	Decem.
1	25	26	26	27	27	28	29	1	3	3	5	
2	26	27	27	28	28	29	30	2	4	4	6	6
3	27	28	28	29	29	1	1	3	5	5	7	7
4	28	29	29	30	30	2	2	4	6	6	8	8
5	29	1	30	1	1	3	3	5	7	7	9	9
6	30	2	1	2	2	4	4	6	8	8	10	10
7	1	3	2	3	3	5	5	7	9	9	11	11
8	2	4	3	4	4	6	6	8	10	10	12	12
9	3	5	4	5	5	7	7	9	11	11	13	13
10	4	6	5	6	6	8	8	10	12	12	14	14
11	5	7	6	7	7	9	9	11	13	13	15	15
12	6	8	7	8	8	10	10	12	14	14	16	16
13	7	9	8	9	9	11	11	13	15	15	17	17
14	8	10	9	10	10	12	12	14	16	16	18	18
15	9	11	10	11	11	13	13	15	17	17	19	19
16	10	12	11	12	12	14	14	16	18	18	20	20
17	11	13	12	13	13	15	15	17	19	19	21	21
18	12	14	13	14	14	16	16	18	20	20	22	22
19	13	15	14	15	15	17	17	19	21	21	23	23
20	14	16	15	16	16	18	18	20	22	22	24	24
21	15	17	16	17	17	19	19	21	23	23	25	25
22	16	18	17	18	18	20	20	22	24	24	26	26
23	17	19	18	19	19	21	21	23	25	25	27	27
24	18	20	19	20	20	22	22	24	26	26	28	28
25	19	21	20	21	21	23	23	25	27	27	29	29
26	20	22	21	22	22	24	24	26	28	28	30	1
27	21	23	22	23	23	25	25	27	29	29	1	2
28	22	24	23	24	24	26	26	28	30	1	2	3
29	23	25	24	25	25	27	27	29	1	2	3	4
30	24		25	26	26	28	28	1	2	3	4	5
31	25		26		27		29	2		4		6

The daily age of the Moon this year, 1684.

